

APPENDIX 2

Summary of Public Comments Received

Review of Public Comments

DEQ published a notice of the federal consistency review for the referenced project on its web site, during the first review, from April 15 through May 2, 2005. No public comments were received at that time.

For the restarted review in 2006, DEQ published a notice of the review on its web site from May 15 through June 16, 2006. On June 15, DEQ published notice of an extended review period lasting until September 8. This notice also announced that DEQ would hold a public hearing on August 16. This notice was published on DEQ's web site and in three newspapers as follows:

Web site (http://www.deq.virginia.gov):	starting June 15
Richmond <u>Times-Dispatch</u> :	July 2
Lake Anna <u>Observer</u> :	July 15
Fredericksburg <u>Free Lance-Star</u> :	July 30

This summary includes responses to comments we received about the referenced project that pertain to the Enforceable Policies of the Virginia Coastal Program (VCP). During the public review process, including the public hearing, we received comments from more than 500 individuals and organizations concerning this review. When more than one individual or organization submitted comments about the same or similar topic, we grouped these comments for the purposes of providing a response.

It should also be noted that throughout the public comment period and at the public hearing, we received a variety of comments that did not pertain either directly to the referenced project or to one or more of the Enforceable Policies of the VCP. For the most part, we determined that many of these comments pertained to approvals and monitoring requirements already in place for the operation of the existing units at the North Anna Power Station and not to the activities that would be authorized by an Early Site Permit, which is the subject of this consistency review. A number of other comments were determined to be related to matters that will be considered should Dominion seek approval for a combined license from the U.S. Nuclear Regulatory Commission (NRC) for the construction and operation of new nuclear reactor units at its North Anna Power station.

Examples of the topics included in these unconformable comments are:

- questions about the appropriateness of the U.S. Environmental Protection Agency's approval of the Virginia Pollutant Discharge Elimination System

(VPDES) permitting program, as it is being administered by the Virginia Department of Environmental Quality (DEQ).

- comments about the differences in the manner in which the “warm” and “cold” sides of Lake Anna are currently regulated by DEQ and the Department of Game and Inland Fisheries (DGIF).
- Comments about safety, transportation, certain health concerns, etc., which are not within the specific authorities of the Enforceable Policies of the VCP.

While we did endeavor to route these comments to an appropriate agency for consideration and possible response, we were not able to utilize these unconformable comments, or any responses received to them, for the purposes of determining consistency review of the federal consistency certification submitted by Dominion for the referenced project. It is anticipated that many of the issues and concerns presented in these comments will be the subject of discussion during the upcoming review of the existing VPDES permit for the current operations at the North Anna Power Station.

It is also anticipated that many of the issues and concerns presented in these comments will be considered during the reviews that will be required should Dominion later seek approval for a combined license from the NRC for the construction and operation of new nuclear reactor units at its North Anna Power station. One of these reviews will be of a separate federal consistency certification that Dominion will be required to submit to the VCP prior to when the NRC may finalize its decision with regard to approval and issuance of the combined license. These unconformable comments are listed at the end of this summary.

Public Comments Received Pertaining to the Enforceable Policies

The following is a summary of the comments received during the public comment period for the referenced project and any responses received from the agencies that administer the Enforceable Policies of the VCP. The public comment period during which these comments were received, began on May 15, 2006, and ended on September 8, 2006. The summary lists the individuals and organizations that submitted comments related to the Enforceable Policies of the VCP as they pertain to the referenced project. In some cases, when more than individual or organization submitted comments about similar topics, we have compiled any responses received on those topics.

In addition to the separate responses to public comments described below from the agencies which administer the Enforceable Policies of the VCP, an overriding response to many of these comments and concerns is the requirement for an Instream Flow Incremental Methodology study to be completed as a condition of the VCP's concurrence with federal consistency certification for the referenced project. The information obtained through this study will be used to address the issues raised in many of the public comments pertaining to there being insufficient information available presently to appropriately address concerns about lake level, fisheries impacts, flow requirements in the North Anna River, protection of sufficient water for other users downstream, and recreation. As was stated in the VCP November 21, 2006, response

letter, because an additional federal consistency certification submission and review will be required if Dominion seeks approval for a combined construction and operating license, the VCP is not forgoing (by conditionally concurring at this time) its opportunity pursuant to the CZMA to establish any necessary specific requirements related to water quality and quantity pertaining to the referenced project.

As a result, the reply to many of the public comments summarized below is that no separate responses were received on these topics.

1. Friends of Lake Anna

DEQ's Office of Environmental Impact Review received a considerable number of comments from the Friends of Lake Anna ("FOLA") concerning the referenced project that concerned either or both the federal consistency certification and the NEPA documents.

We have determined that many of FOLA's comments did not pertain to the authorities provided to the VCP under the provisions of CZMA or to the Enforceable Policies of the VCP. Moreover, we found that the majority of FOLA's comments pertained to concerns about the current operation of the North Anna Power Station, but not directly to the referenced project. Throughout the review process of the federal consistency certification for the referenced project, we did make every effort to explain to FOLA representatives the distinctions among the various federal and Virginia statutes and regulatory programs that pertain to the existing and proposed operation of facilities at the North Anna Power Station. We wish to recognize and thank FOLA for its diligence in providing its detailed comments and concerns about both existing operations at the North Anna Power Station and the proposals described in the referenced project. We encourage FOLA to stay involved in both the upcoming consideration of the reissuance of the existing VPDES permit for the current operations at North Anna, and the federal and state reviews of the application for a combined construction and operating license of one or both of the proposed new units – should Dominion later apply to the NRC for such a license.

Comments submitted by FOLA that did pertain to both the referenced project and the Enforceable Policies of the VCP are summarized below. Included in each summary are any responses we received from the state agencies which administer the VCP's Enforceable Policies. The other comments we received from FOLA that did not conform to the VCP's authorities under the CZMA or to the referenced project, are summarized in a different section of this appendix.

FOLA letter dated June 15, 2006 On July 27, DEQ forwarded FOLA comments and questions to a number of agencies and localities to solicit additional comments. These comments and questions were entitled "Partial Concerns #2 with the data contained in Dominion's Application for the North Anna ESP 6 dated April 2006 and the related NRC Safety Report dated September 2005." The issues were discussed in nine categories:

- 1) Numbers of workers, residential growth, traffic on small local roads
- 2) Emergency evacuation capabilities
- 3) Need for new schools
- 4) Meeting water needs with the Lake and the North Anna River
- 5) Cooling towers, noise, and fog
- 6) Lake level raising for drought preparedness
- 7) Water levels, flows, and temperatures
- 8) Confusing documentation and processes
- 9) Safety report

We determined that four of these categories relate directly to the VCP's Enforceable Policies as they pertain to the referenced project:

- 4) Water needs
- 5) Cooling towers
- 6) Lake level
- 7) Water level

Responses from DEQ's Division of Water Resources: DEQ-DWR provided additional comments concerning issues #4, 6, 7, and 8, as follows:

- With regard to water needs (issue #4), DEQ-DWR stated that Louisa and Spotsylvania Counties appear to be focusing on sources of water supply other than the Lake. Spotsylvania has recently permitted water supply projects. Louisa appears to be contemplating water from Bowlers' Mill Reservoir, the James River via Fluvanna County, and the Rapidan River via Orange County.
- With regard to raising the lake level 6 to 12 inches to aid in times of drought (issue #6), DEQ-DWR states that DGIF has suggested surcharging the lake 3 inches in the spring to boost in-stream releases over the summer, an idea that DEQ-DWR would not favor without further study. There is no state consideration of a 6- to 12-inch lake level increase, according to DEQ-DWR.

FOLA Public Hearing Presentation A representative of the Friends of Lake Anna spoke at the Public Hearing on August 16, 2006, and provided a written copy of the testimony that was presented. Some highlights of the presentation follow. Where it was clear, we have organized the comments made as they are related to the Enforceable or Advisory Policies of the VCP.

Fisheries Under the fisheries management enforceable policy discussion (presentation, page 2), FOLA cites the Department of Game and Inland Fisheries finding that fish will continue to be adversely affected even if the changes to the third reactor have been made. FOLA cites the increase in drought conditions as a major reason for this effect.

Downstream Recreation FOLA cites the Department of Conservation and Recreation for the proposition that the North Anna River is a spectacularly scenic and remote canoeing river with excellent fishing, and that a minimum in-stream flow recreation study should be conducted to determine a discharge rate from the Lake Anna Dam that would sustain recreational boating from State Route 601 downstream to U.S. Route 301.

Drought frequency Under the Point Source Pollution Control Enforceable Policy of the VCP, FOLA cites the Commonwealth's Comments on the Draft EIS (DEQ-04-216F, comments mailed March 3, 2005) for the proposition that large water withdrawals would adversely affect the beneficial uses of the North Anna River. Specifically, FOLA cites DGIF and DEQ analyses as indicating that the proposed Unit 3 would increase the drought cycle and cause decreased water flows during seven months of each year.

Water temperature limitations According to FOLA, the water temperature currently exceeds the temperature necessary to protect aquatic resources. Any additional temperature increases, such as from the blow-down discharges from water cooling towers, would affect fisheries, public access, and recreation.

Responses Received: No separate responses were received regarding these comments.

2. Lake Anna Civic Association/Waterside Property Owners' Association

On August 28 and 29, 2006, DEQ-OEIR received letters and e-mail correspondence from the Lake Anna Civic Association (LACA) and the Waterside Property Owners' Association (WPOA) covering a number of issues. A summary of these issues was presented in the Commonwealth's comments on the SDEIS and the relevant sections are copied here.

Quality of Cooling Water Discharges WPOA indicates its concern with the chemical nature of hot make-up water returning to the Lake from proposed Units 3 and 4, and inquires whether there are criteria for the discharge.

Bald Eagle Protection According to WPOA, the Commonwealth requires a 1/4-mile buffer between construction activities and any bald eagle nest, and inquires about how the applicant will protect the closest nest.

Decision Responsibility on Lake Levels WPOA indicates its understanding, from the SDEIS, that the determination of lake levels is up to Virginia regulators, and asks which ones. WPOA also asks how residents can be assured that the lake level will remain at 250 feet msl.

Water Use and Dry Cooling WPOA states that blowdown and make-up water taken from the reservoir would be 38.7 cfs at Unit 3's 100% power level, while the discharge over the dam is 40 cfs or 20 cfs in a drought. Thus the blowdown and make-up water use

would be as much as the downstream discharge when the lake is at 250 feet or less. WPOA recommends dry cooling for Unit 3 to preserve the water in the watershed.

VPDES Permit and Temperatures WPOA quotes the SDEIS as saying that the new plant can operate to a 242-foot msl lake level and an inlet water temperature of 100 degrees F., and states that this is a much greater variance than allowed in the VPDES permit, which allows an inlet temperature of 95 degrees. WPOA urges the Department of Health (VDH) to put limits on the temperature of the water at the exit of the power plant, and states that the situation will get worse with the addition of Unit 3.

Sprayers for Cooling WPOA urges that sprayers be used in the discharge canal on hot days, as is done for Units 1 and 2.

Pre-Lake Water Flows The SDEIS indicated that historic pre-dam minimum flows were 5 cfs (page 2-10, section 2.6), whereas the Department of Game and Inland Fisheries stated that such flows were 12 cfs (July 7, 2006 letter, Table 1). WPOA states that this discrepancy should be resolved.

Availability of Dry Cooling WPOA states that foreign nuclear reactors use air cooling technology, and that Dominion has not stated clearly why it cannot be proposed for Unit 3 as well as Unit 4.

Duration of 20 cfs flow WPOA cites the SDEIS for the proposition that the 20-cfs flow will increase from 6% to 11% of the time if Unit 3 operates as proposed; this means an increase from 22 days to 40 days of low flow (SDEIS, page 5-11, section 5.3.2). However, Dominion stated in its Revision 7 that the duration of the 20-cfs discharge would go from 5.2% to 7% of the time. The discrepancy should be resolved.

Responses from the Department of Health On September 8, the Department of Health's (VDH) Division of Public Health Toxicology responded that there appeared to be no point for which a VDH response was in order on the comments submitted by LACA and WPOA.

Responses from DEQ's Northern Virginia Regional Office On September 7, DEQ-OEIR received comments (e-mailed) from DEQ's Northern Virginia Regional Office responding to four of the issues raised above. With regard to water quality and the chemical discharge, DEQ-NVRO states:

Chemical usage and effluent discharge concentrations will be evaluated against applicable water quality criteria if and when Dominion applies for a modification of their [sic] VPDES permit for Units 3 and 4. The permit will contain the necessary conditions to assure that the water quality standards are met.

With regard to lake levels, DEQ-NVRO indicates that the existing VPDES permit does not have any requirement for maintaining the lake level at 250 feet above mean sea level, and that the existence of such a requirement is not known to DEQ-NVRO staff.

DEQ-NVRO indicates that lake levels might be addressed by regulatory action of the Department of Conservation and Recreation's Division of Dam Safety.

With respect to the section 316(a) variance and temperature limits in the VPDES permit, DEQ's NVRO states the following:

The 316(a) variance does not set a maximum temperature level of the effluent or for temperatures in the lake. In accordance with 9 VAC 25-260-90 [state water quality regulations], the temperature criteria in 9 VAC 25-260-50 through 9 VAC 25-260-80 are superseded because Dominion demonstrated in a 316(a) study and through subsequent annual fishery monitoring that the heat rejection limits set forth in the VPDES permit do not impair the fishery of Lake Anna or the North Anna River.

With respect to the sprayers for cooling, DEQ-NVRO stated that in setting effluent limits and permit conditions in VPDES permits, the agency does not dictate the processes or treatment units that permittees must use to comply with effluent limits. Dominion may use sprayers if it believes sprayers will aid in permit compliance.

Responses Received: No additional agency responses were received about these comments.

3. Southern Environmental Law Center

A representative of the Southern Environmental Law Center (SELC) spoke at the August 16, 2006, Public Hearing. SELC also sent separate correspondence in connection with this review.

SELC Public Hearing Presentation SELC stated that its earlier comments of October 2005 voiced concerns regarding the amount of lake water evaporation that the once-through cooling system (proposed in the 2003-2004 federal consistency certification, the Draft EIS, and the initial 2005 federal consistency certification) would have induced, as well as potential downstream impacts from the corresponding reduction in flows in the North Anna and Pamunkey Rivers. Citing earlier DEQ statements, the SELC representative indicated that the Lake Anna watershed is relatively small, so that even slight increases in the consumptive use of water could have significant downstream impacts. Reductions in water releases to the North Anna River could adversely affect the State's management of its coastal fisheries. SELC cited recent correspondence by the Department of Conservation and Recreation, which stated that lower downstream flows could also affect recreational uses of the North Anna and Pamunkey Rivers.

SELC also indicated that a number of counties are considering the North Anna and Pamunkey Rivers as sources for drinking water. For this reason, putting additional strain on these rivers undermines the Commonwealth's policy goal of avoiding coastal resource use conflicts. The change from closed-cycle, once-through cooling to the wet-dry cooling method offers only slight improvement in reducing lake water evaporation.

SELC points out the difference in Dominion's analysis and that of the NRC: Dominion says that the minimum flow of 20 cfs at the dam would be reached about 7.3% of the time, while the SDEIS, by NRC, indicates that this flow level would be reached 11% of the time. The latter is just slightly lower than the percentage of time at 20 cfs with the once-through cooling system, which was 11.7%.

SELC's representative stated that DEQ's Division of Water Resources and the Department of Game and Inland Fisheries based their recommendations on Dominion's analysis and suggested that they should re-evaluate the recommendations in light of the information in the SDEIS. However, if DEQ and the Department of Game and Inland Fisheries decide that their recommended conditions are sufficient to protect coastal resources, then SELC recommends that the Commonwealth object to the federal consistency certification, rather than conditionally concur, and that the objection be maintained until Dominion affirmatively and unquestionably incorporates the agency recommendations into its project design.

September 8, 2006 Comments A short summary of the SELC comments follows.

Downstream flows While the revised cooling system design for Unit 3 reduces concerns with regard to the discharge of heated water to Lake Anna, concerns regarding reduced flows downstream remain, because evaporation from the cooling towers would equal or possibly surpass that from the Lake surface under the once-through system originally proposed.

Potential impacts of low flows in this relatively small watershed may be significant, and the ability of the Lake and the River to withstand additional consumptive use merits close scrutiny, according to SELC. The mean annual flow at the Dam is approximately 370 cfs. The Virginia Water Protection Permit for the existing reactors requires a minimum discharge of 20 cfs from the Dam to the North Anna River. This is equal to 5.4% of the River's mean annual flow at the Dam. Under the Tennant rating system, which is a stream flow grading technique based on percentages of mean annual flow, a flow of less than 10% of the mean annual flow is rated as "severe degradation." Moreover, with additional evaporative losses caused by the operation of the third reactor, the duration of 20-cfs flows would increase from 5.8% to 7.3% of the time, according to Dominion's analyses, or to 11% of the time according to NRC's initial review in the Draft EIS.

These low flows could have impacts conflicting with the Fisheries Management enforceable policy of the Virginia Coastal Resources Management Program. Specifically, they could:

- Adversely affect anadromous fish habitat.
- Adversely affect early life stages and spawning of fish in the river, because these stages take place during typically drier months of the year (July through October), and they need substantial flows to survive in any abundance.
- Adversely affect downstream boating and fishing recreational uses of the River.

- Encounter or give rise to potential conflicts in uses, in light of the considerations of several counties (one upstream and three downstream of the Lake) of using the North Anna River or the Pamunkey River for local water supplies. This last effect would undermine the Commonwealth's coastal program policy goal of avoiding coastal resource use conflicts.

Recommendations on flows SELC recommends that DEQ obtain a commitment by Dominion to use air cooling for both Units 3 and 4 in order to minimize impacts upon coastal resources.

Objection Recommendation SELC recommended that DEQ object to the certification.

Responses Received: No separate responses were received regarding these comments.

4. Natural Resources Defense Council The Natural Resources Defense Council (NRDC), in a letter dated September 8, presented nine major arguments against state concurrence with the federal consistency certification. The statements of these arguments follow, with highlights from the text of each.

Concurrence now would be premature and not in the interests of ensuring protection of Virginia's coastal zone management area. NRDC indicated that the ESP process is not a required step in the NRC process. Environmental concerns that the NRC deems "resolved" during the ESP proceeding cannot be raised again at a subsequent stage of NRC's licensing process. Faced with a project whose design is continually evolving, this foreclosing aspect is not in the state's favor. Since the environmental impacts of the evolving proposal are defined by a general "plant parameter envelope" comprised of nominal operating values instead of those pertaining to a site-specific detailed plant design, NRDC saw significant disadvantages for state concurrence.

Understanding of the long-term and cumulative environmental impacts from operating the proposed Unit 3 "wet-dry" hybrid cooling system is currently insufficient to support a federal consistency determination. NRDC stated its view that, according to the SDEIS, for times of full power operation and a "hot and humid atmosphere at tower level," (a fairly typical condition for a peak power summer day in central Virginia), the applicant is committing only that "a minimum of one-third of the rejected heat from Unit 3 would actually be removed by the dry tower system. The remaining excess heat would be dissipated by the wet tower system" It appeared to NRDC that this is the only commitment Dominion is making.

The SDEIS fails to analyze a reasonable range of reasonably foreseeable impacts from operating Unit 3. In this discussion, NRDC presented three parameters for the original proposal that DEQ found unacceptable, and compared them with the same

parameters estimated in the SDEIS, for the wet-dry, semi-closed loop system. This information is presented in the table below.

<u>Parameter</u>	<u>Originally proposed</u>	<u>Proposed in SDEIS</u>
Rate of lake water withdrawal	1,140,000 gallons per minute	22,269 gallons per minute in normal “Energy Conservation” mode
Induced evaporation rate	28 cfs	20 cfs
Additional lake level drawdown during drought	3.4 feet	1.6 feet

NRDC asserted that the estimated impacts remain significant, stating, for example, that the induced evaporation rate from operation of the wet-dry cooling system is still 71 percent of the environmentally unacceptable once-through system. The additional lake level drawdown is still nearly half that of the once-through cooling system, and there are uncertainties associated with this calculation that NRC and Dominion have not bounded with a sensitivity analysis.

The projected lake levels pose environmental and energy security risks that require further detailed analysis before concurrence can be granted. NRDC pointed out that the analysis of lake levels by NRC looks back to 1978, noticing that from then until 2003, Lake Anna has been under the 250 foot msl target level 62.7 percent of the time, due to the combined effects of reduced inflows and evaporative effects of operating Units 1 and 2. The additional Unit 3 wet-dry system would, if added in 1978, have increased the figure slightly, to 66.4 percent of the time, while reducing the total time the Lake was at or above 250 feet by 3.7%. Similarly, the frequency of lake levels below 248 feet (and the reduction of downstream flows from 40 cfs to 20) would have been higher with the addition of Unit 3. Looking backward, the addition of Unit 3 would have reduced downstream flows. NRDC pointed out that NEPA calls for an analysis of “reasonably foreseeable” impacts; and there was no analysis of the anticipated hydrological conditions in the next 40 to 60 years (life expectancy of the new unit), as affected by population increases, climate, water tables and recharge rates, competing uses, or evaporation rates. Moreover, there was no analysis of potential negative feedback loops - for example, in which increased natural heating of cooling intake water increases the evaporation rate of both types of cooling systems (wet-dry and existing once-through), leading to higher discharge temperatures and/or increase net withdrawals from the lake. This would lead to reduced lake volume, further heating of the reduced volume of lake water, and the cycle would repeat itself. NRDC stated that no one knows how vulnerable the proposed setup is to such a negative feedback loop scenario, but regulators might, in such case, be faced with decisions whether to shut down or reduce power or incur serious ecological damage.

The status quo is not an acceptable baseline for NEPA analysis. According to NRDC, the NRC analysis in the SDEIS assumes that the current environmental impacts of Units 1 and 2 are acceptable as a baseline. However, these operations have resulted in excessive temperatures in the main body of the Lake (i.e., well outside of the cooling

lagoons) and produced many days of reduced flows into the lower reaches of the North Anna River. NRDC proposed that a more credible baseline for analysis, and for estimating cumulative impacts, would be the temperatures, flows, and fauna in the River before it was impounded to form the Lake. For example, prior to dam construction, flows of 25 cfs or less would occur for about 10 weeks once every 10 years. One can calculate from NRC's modeling data that operation of Units 1 and 2 has increased that frequency to 30 weeks every ten years.

The SDEIS unreasonably discards dry-cooling (air cooling) for Unit 3 as an alternative meriting detailed analysis, but DEQ should not. NRDC cited earlier analysis by DEQ's Division of Water Resources which compared North Anna with other nuclear reactors along the East Coast to compare water resources available to them with those at North Anna. Dominion has proposed a dry-cooling system for proposed Unit 4, and recognized that Lake Anna would not support once-through wet cooling, or even a combination wet and dry system, for Unit 4. NRDC stated that the dry-cooling of Unit 3 is mentioned only briefly in the SDEIS, but that the SDEIS indicates that the dry cooling system for Unit 3 would "largely eliminate the [unit's] impact on aquatic biota in Lake Anna and the North Anna River downstream." However, the SDEIS fails to identify the dry-cooling option as an "environmentally preferable alternative" deserving further analysis. NRDC argued that the difference in electrical output between a unit with dry cooling and that with wet-dry cooling is too small to "make or break the economics of a project of this magnitude" or lead NRC to summarily dismiss the dry-cooling option as being environmentally inferior.

NRDC further believed that the lack of these analyses in the Draft EIS and the SDEIS is another substantive reason to object to the federal consistency certification.

Responses Received: No separate responses were received about these comments.

5. Blue Ridge Environmental Defense League. In a letter to DEQ dated August 16, the Blue Ridge Environmental Defense League ("League") stated that the basic consistency issue is whether Dominion had provided enough information to allow DEQ to assess whether the proposed project would be consistent with the Coastal Resources Management Program; the League answered the question in the negative.

The League stated that even if the plant parameter envelope is bounded by the thermal power benchmark (Dominion plans to add 9000 MWth of new power generating capacity, according to the League), the Commonwealth has no assurance that water usage for more than the two existing units will not exceed safe levels. The NRC's SDEIS provides details on the plant parameter envelope, indicating that seven possible reactor designs are under consideration. The SDEIS indicates where the approximately 1,800-acre footprint for the reactors would be, but the plant parameter envelope review is based on educated guesswork, according to the League, because Dominion apparently cannot provide NRC with the necessary data. As the SDEIS indicates:

In some cases, the design-specific information called for in the ESRP [Environmental Standard Review Plan, NUREG-1555, Volume 1, a source of guidance for NRC review of early site permit applications] were [sic] not provided in the Dominion ESP application because it did not exist or was not available. Therefore, the NRC staff could not apply the ESRP guidance in those review areas.... Because the Dominion PPE [plant parameter envelope] values do not reflect a specific design, *they were not reviewed by the NRC staff for correctness* [emphasis added by the League].

The League quotes the SDEIS as stating that the standard used by NRC for its environmental review was that PPE values were “not unreasonable.” The League thought that this “not-unreasonable” standard is not supportable or acceptable for use as a basis for a consistency determination by DEQ. It referred to additional prose in the SDEIS, to the effect that at the combined construction and operating license (“COL”) stage, Dominion will need to show that its design falls within design parameters specified in the Early Site Permit. If proposed reactor characteristics do not fall within the PPE, NRC staff will then consider whether the difference between the characteristics and the PPE value is significant. According to the League, this means that DEQ’s assessment of consistency with the Coastal Resources Management Program must include potential coastal resources impacts from both construction and operation of two or more actual reactors. The League cites the Coastal Zone Management Act (section 307(c)(2)) for the proposition that a federal agency undertaking a development project must ensure that the project is, to the maximum extent practicable, consistent with enforceable policies.

Responses Received: No separate responses were received to these comments.

6. Other Public Comments

General Comments Several citizens submitted comments concerning the issues of water evaporation and reduced downstream flows in the North Anna River, neither of which they believed would be addressed by the proposed modified cooling method for Unit 3. On August 8, DEQ-OEIR sent an example comment to VDH (Office of Drinking Water and Division of Public Health Toxicology, inviting VDH to address the question of water supply and downstream flows in light of Spotsylvania County’s objection on the basis that diminished flows downstream would be harmful to the County.

Responses: No additional responses were received from VDH to these comments.

Christian and Barton, on behalf of Bear Island Paper Company. In a letter dated September 8, 2006, Christian and Barton provided Bear Island Paper Company’s comments (hereinafter attributed to “Bear Island”). Bear Island believes that the proposed expansion of North Anna (i.e., addition of Units 3 and 4) would give rise to substantial increases in the number and severity of low-flow conditions in the North Anna River. Bear Island relies on the River at points below the Dam for intake of water

and for discharge of treated industrial wastewater and stormwater associated with its Doswell facility. These additional periods of low flows can be expected to materially and adversely affect the operations of Bear Island by restricting its ability to withdraw water from the River, as needed and as permitted, as well as putting at increased risk the ability of the combined wastewater flows from Bear Island and Hanover County to meet current permit requirements and water quality standards.

In this connection, Bear Island refers to Hanover County's comments on the federal consistency certification and the concerns about negative impacts on downstream flows raised by DEQ in its March 3, 2005, comments on the Draft EIS for the Early Site Permit. Bear Island does not believe that the modification of the plans for the additional units since March 2005 fully addresses these concerns, and requests that DEQ object to the federal consistency certification or at least require further evaluation of downstream effects, alternative designs, and potential mitigation.

Responses Received: We did not receive any separate responses to these comments.

Unconformable Comments Received

The comments summarized in this section were all determined to be not related to the VCP's authorities pursuant to the CZMA as they pertain to the referenced project. These comments do not pertain to either directly to the referenced project or to one or more of the Enforceable Policies of the VCP. For the most part, we determined that many of these comments pertained to approvals and monitoring requirements already in place for the operation of the existing units at the North Anna Power Station, and not to the activities that would be authorized by an Early Site Permit, which is the subject of this consistency review. A number of other comments were determined to be related to matters that will be considered if and when Dominion seeks approval for a combined license from the U.S. Nuclear Regulatory Commission (NRC) for the construction and operation of new nuclear reactor units at its North Anna Power station.

Attached to this Appendix are copies of correspondence we received from the U.S. EPA and two of the DEQ programs that administer the Point Source Pollution Control and Wetlands Enforceable Policies of the VCP. This correspondence explains why these comments do not conform to the VCP's authorities pursuant to the CZMA as they pertain to the referenced project. As a result, the reply to many of the public comments summarized below is that no separate responses were received on these topics.

1. Friends of Lake Anna

FOLA June 14, 2006 Letter DEQ's Office of Environmental Impact Review received a June 14, 2006, letter from the Friends of Lake Anna ("FOLA") entitled "Lake Anna Cooling Lagoon concerns with the North Anna ESP." This letter raised several questions about the cooling lagoon ("hot side") of Lake Anna, and the regulation of its discharge point and discharge temperature under the Clean Water Act. DEQ forwarded this letter to the Department of Game and Inland Fisheries, DEQ's Division of Water Resources, DEQ's Northern Virginia Regional Office, and the Department of Health and requested comments by July 17 on:

- Provisions of law or regulation exempting the "hot side" of the lake from regulatory purview.
- Monitoring responsibilities and any differences in how they are carried out in different parts of the Lake.
- Whether FOLA's characterizations of agency responsibilities were correct.
- Any temperature limits in permits that apply to the "hot side" of the lake.

Responses from the Department of Game and Inland Fisheries: DGIF responded to this inquiry (e-mail dated June 21) by stating that fishing licenses are required for anglers in the "hot side" of the Lake, since that side is corporately owned. However, fisheries on that side are not actively managed (i.e., sampling, habitat work) because there is no public access. Game wardens enforce boating laws and promote safety, however, in connection with fishing and boating.

Responses from DEQ's Division of Water Resources: DEQ-DWR responded to this inquiry (e-mail dated June 16), stating that the Friends of Lake Anna appear concerned with the operation of the two existing units, and that Dominion, DEQ, or NRC all do not contemplate any additional thermal load to the Lake from either new proposed unit.

Responses from Department of Health: VDH responded (enclosed letter, Stroube to Irons, dated July 14), stating that the issues in the e-mail and in the FOLA comments pertain to the regulation and monitoring of water temperature in the cooling lagoon or "Waste Heat Treatment Facility," and that such regulation and monitoring are not under the regulatory or statutory authority of VDH. VDH routinely provides consultation and recommendations to agencies and citizens regarding adverse human health impacts from exposure to chemical, biological, and radiological agents, according to the letter. Reference was made to an earlier VDH letter assessing potential risks and recommending ways to minimize such risks (September 15, 2005 letter, Stroube to Burnley, enclosed.)

FOLA June 15, 2006 Letter On July 27, DEQ passed additional FOLA comments and questions to a number of agencies and localities and requested responses. These comments and questions were in a letter dated June 15, entitled "Partial Concerns #2 with the data contained in Dominion's Application for the North Anna ESP 6 dated April 2006 and the related NRC Safety Report dated September 2005." The issues were discussed in nine categories:

- 1) Numbers of workers, residential growth, traffic on small local roads
- 2) Emergency evacuation capabilities
- 3) Need for new schools
- 4) Meeting water needs with the Lake and the North Anna River
- 5) Cooling towers, noise, and fog
- 6) Lake level raising for drought preparedness
- 7) Water levels, flows, and temperatures
- 8) Confusing documentation and processes
- 9) Safety report.

Because a number of these issues fall outside the purview of the framework of coastal zone management program consistency, as well as the environmental issues under consideration as we reviewed the Supplemental Draft EIS, under NEPA, DEQ requested the review of issues as follows (here we repeat the above listing, indicating agencies to address each item):

- 1) Workers' numbers
- 2) Evacuation
- 3) Schools
- 8) Documentation, processes
- 9) Safety report

Responses from DEQ's Division of Water Resources: DEQ-DWR provided additional comments concerning issues #9, as follows:

With regard to the safety report, DEQ-DWR's purview extends only to making sure that there is enough water to cool the reactors. The water for this purpose is sufficient, according to DEQ-DWR.

Responses from Department of Transportation: VDOT responded to these comments from citizens (as indicated in the Commonwealth's Comments on the SDEIS):

VDOT indicated that it would work with Dominion to ensure that the roads in the vicinity of the North Anna Power Station are maintained and that necessary improvements are in place prior to any major activities at the project site. VDOT has requested a traffic impact analysis from Dominion; this would compare the future background traffic in the area with future traffic including construction traffic ("total traffic"), and would identify areas of impacts. The impacts -- some of which would be temporary, from construction, and some of which would be permanent -- are the responsibility of Dominion. The traffic impact analysis should also provide mitigation measures to reduce the impacts. According to VDOT, an evacuation plan was not included in the SDEIS and therefore cannot be addressed.

FOIA July 24, 2006, E-Mail DEQ received correspondence dated July 24, 2006, via e-mail from FOIA, and entitled "Partial Concerns #3 with the Data contained in Dominion's application for the North Anna ESP 6 dated April 2006." The comments related to Dominion's Revision 6 and the NRC Safety Report dated September 2005. DEQ forwarded this correspondence to the following agencies for any additional comments:

U.S. Environmental Protection Agency (EPA)
DEQ's Division of Water Resources (DEQ-DWR)
DEQ's Northern Virginia Regional Office (DEQ-NVRO)
Department of Game and Inland Fisheries (DGIF)
Department of Conservation and Recreation's Division of Natural Heritage (DCR-DNH)
Department of Conservation and Recreation's Division of Planning and Recreation Resources (DCR-DPRR)
Department of Health (VDH)
Army Corps of Engineers (ACOE), Norfolk District

Responses Received: We received no separate responses directed to these issues.

FOIA Public Hearing Presentation A representative of the Friends of Lake Anna spoke at the Public Hearing on August 16, 2006, and provided a written copy of the testimony that was presented.

Model project FOLA favors the addition of the third and fourth units at the North Anna Power Station and believes that, if its environmental concerns are taken into account, the new reactor units could become a model for continued growth of nuclear energy throughout the country.

Responses Received: No additional response was received on this matter.

FOLA September 5 Letter In a letter dated September 5, 2006, the Friends of Lake Anna (FOLA) asked that a number of additional concerns, relating to the conduct of the public hearing process and the extent of public involvement with the Safety Report, be considered in the NEPA and CZMA review processes.

Dominion's Attempt to Influence Public Hearings According to FOLA, more than 50% of the speakers at the NRC public meeting on August 15, and the DEQ Public Hearing on federal consistency on August 16, were Dominion employees, retirees, or contractors. Whenever a Dominion person spoke, a busload of approximately 60 of Dominion's retirees would clap loudly and voice approval of the comments. Before the end of the DEQ hearing, an announcement was made by one of the retirees that the Vepco/Dominion bus was leaving for Richmond; about 60 people got up and left the hearing.

FOLA stated its belief that, in an auditorium with a capacity of about 300 people, the numbers of employees, retirees, and contractors for the applicant made a mockery of the public hearing process. FOLA cited the federal government's NEPA obligation:

"It is the continuing responsibility of the Federal Government to use all practicable means consistent with other essential consideration of national policy to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may *[in part]* (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasant surroundings; (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; ..."

FOLA then asks how this domination of the hearing process can be prevented in future public hearings.

Response from DEQ's Policy Division: These hearings are for the public and DEQ does not control or limit who may participate on either side of an issue. It is not, however, a process that leads to conclusions based upon what appears to be majority or minority opinion, but rather based upon the substantive merits of the information provided.

Safety Report and Public Involvement FOLA made reference to the March 1979 Three-Mile Island nuclear plant incident in Pennsylvania, stating that the absence of water in the steam generators meant that no heat could be removed from the reactor. The result was a partial melt-down of fuel in the reactor. FOLA's representative at the NRC public meeting asked a number of questions relating to the safety of the North Anna Power Station and the North Anna Dam. He stated that the Lake, which provides cooling water for the plant, would empty out in the event of an attack on the dam, and that re-filling the Lake would take three years. The FOLA letter urged that the air cooling method for the proposed Unit 4 could be used, as well, for Unit 3, and that this makes more sense than water-cooling for Unit 3 in a small watershed such as that of Lake Anna.

Conclusions FOLA stated that the public needs to be involved in reviewing the Safety Report, and to be given time for it in light of the voluminous documentation that has been provided over the review period, and the continuing changes that the documentation reflects. FOLA requested an extension of the public comment period for review of all of this material.

Responses Received: No additional responses were received regarding these matters.

2. Lake Anna Civic Association/Waterside Property Owners' Association

On August 28 and 29, 2006, DEQ-OEIR received letters and e-mail correspondence from the Lake Anna Civic Association (LACA) and the Waterside Property Owners' Association (WPOA) covering a number of issues. A summary of these issues was presented in the Commonwealth's comments on the SDEIS and the relevant sections are copied here.

Transportation According to WPOA, the NRC staff deems the road network in the vicinity of the project site to be "well developed." WPOA seeks a construction traffic management plan, worked out with members of the public, and improvements including a traffic light to the intersection of State Routes 652 and 700.

Responses received from the Department of Transportation: In a September 5 e-mail, VDOT indicated that its August 16 comments for the SDEIS sufficiently address this issue. In the August 16 comments, VDOT stated:

Currently, VDOT does not have any plan for improving the road network in this area. There are some developments that are proposing road improvements in this area of the County, the largest being the Cutalong Club development. This development is proposing to move the Route 208 connection with Route 652 to eliminate the skewed intersection and add the required turning lanes at the intersection. The plans are under design and are proposed to be built within the next several years.

Cost Savings: Reduced Intake Size and Cooling Towers Dominion says that adding cooling towers will add \$200 million to the \$2.5 billion cost of each unit. However, the intake for the proposed Unit 3 will be much smaller than the original intake, which also required dredging and shoreline alteration. Dominion did not address this potential cost saving.

Responses: No additional agency comments were received on this matter.

3. Southern Environmental Law Center

A representative of the Southern Environmental Law Center (SELC) spoke at the August 16, 2006, Public Hearing. SELC also sent separate correspondence in connection with this review.

September 8, 2006 Comments A short summary of the SELC comments follows.

“Hot side” jurisdiction SELC stated that Dominion neglects potential thermal impacts on the “hot side” of Lake Anna by insisting that under state law, it may treat this part of the lake as its private property. SELC stated its belief that, regardless of the ownership of land under or surrounding the Lake, the “hot side” inundated numerous existing streams and remains “waters of the United States,” and thus subject to the Clean Water Act and the Coastal Zone Management Act. SELC urged DEQ to reduce existing thermal impacts in the “hot side” of the lake by requiring compliance with water quality standards to be measured at the point of discharge from the plant. While this issue relates to the renewal of Dominion’s NPDES permit, it should be analyzed thoroughly, in the view of SELC, before a consistency decision is taken.

Responses Received: No separate responses were received to this comment.

4. Louisa County Public Schools The Louisa County School Board indicated its neutrality on whether the additional reactors should be built, but expressed its disagreement with the findings of the SDEIS that impacts on demography, housing, and education would be “small” and that “mitigation is not warranted.” The School Board stated that additional tax revenues to the County from the new reactors would accrue only after schools had already been affected by as many as 200 new students (compared to a system of 4,400 students now, operating at capacity). There are three new subdivisions approved, comprising approximately 1,800 new houses, that are likely to be built in the vicinity of the project in the next few years.

Apart from the large (proportional) increase in student population, the School Board is also concerned about teacher retention due to the difficulty in finding affordable housing in the County. With an influx of construction workers, this competition for housing will get more difficult.

Accordingly, the Louisa County School Board notes that the federal government has shown its keen interest in nuclear energy by funding 50% of the impact study (approximately \$8-10 million), and requests DEQ and the Nuclear Regulatory Commission to assist the County in obtaining a federal grant to offset or minimize the negative impact of the large nuclear construction project in the rural county.

Responses: No responses were received on these comments.

5. Natural Resources Defense Council The Natural Resources Defense Council (NRDC), in a letter dated September 8, presented nine major arguments against state concurrence with the federal consistency certification. The statements of these arguments follow, with highlights from the texts of each.

Before concurring that the environmental impacts of activities in the ESP are consistent with the enforceable policies of the Coastal Zone Management Program, DEQ has a duty to resolve outstanding issues surrounding the existing VPDES permit for the North Anna Power Station. In this portion of its letter, NRDC referred to Public Hearing comments by the Friends of Lake Anna, restating its own view that the VPDES permit is an Enforceable Policy of the VCP. NRDC stated that irrespective of the legal merits of the claim that the State has erred in continuing to designate the cooling lagoons as a “waste heat treatment facility,” Dominion cannot plausibly claim that the waters are indeed private, but then evade strict monitoring of Clean Water Act compliance at the Dike 3 discharge point.

NRC’s ESP review process is defective and hinders meaningful participation by the public. In this discussion, NRDC cited the Friends of Lake Anna’s view, and the views of others reflected in these Comments, that NRC accepts changes to the proposed project without adding opportunity for public comments or to make revisions in the Draft EIS under review. NRDC recommended that DEQ should treat the date of the last revision as the starting date for federal consistency certification.

The NRC’s site comparison methodology is flawed and obscures important environmental advantages of alternative sites. NRDC was not persuaded by the NRC staff determination that another site is not “obviously superior” to North Anna on environmental grounds, and that it fails to indicate whether any other site would be “superior.” The imprecise language -- impacts are described as “small,” “moderate,” or “large” -- apparently allows NRC staff to recommend any site Dominion prefers short of causing an obvious catastrophe. NRC stated its belief that the ESP process raises three sets of legal issues:

- possible violation of citizens’ due process rights under NEPA, the Administrative Procedures Act, and the NEPA regulations;
- the tailored analysis of alternatives may have unreasonably failed to identify one of Dominion’s alternative sites, such as the Surry Plant, as “obviously superior” when the impacts of heat dissipation and also those of water withdrawal at Surry are clearly less than they are at Lake Anna; and

- the questionable analysis of the vulnerability of the North Anna site to both climate change and terrorist threats.

Responses Received: No separate responses were received about these comments.

6. Other Public Comments

Delegate W. R. “Bill” Janis In a letter to NRC dated August 14, 2006, (enclosed), Delegate Janis, who represents Louisa and Goochland Counties and the northwestern part of Henrico County, expressed his concurrence with the NRC staff’s conclusion that the Early Site Permit should be issued. Delegate Janis indicated that Dominion’s North Anna and Surry plants provide 34 percent of the electricity used in Virginia.

With regard to the once-through cooling method of the existing reactors, Delegate Janis states that Dominion has agreed to spend \$200 million on a cooling tower system for the third reactor, obviating any need for lake water for cooling. He indicates that there is no scientific evidence of adverse public health or environmental impact of the existing “waste heat treatment facility.”

Responses Received: No separate responses were received about these comments.